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水诱发伪尖毛虫核与毛基系的变异

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摘要　本文以伪尖毛虫（Oxytricha fallax）为材料，进行不同的浓度的水处理。实验表明，水诱发伪尖毛虫大核变异，随水浓度增加而畸变率上升，但畸变幅度不大，移入正常环境中即恢复正常。水诱发伪尖毛虫毛其发生变异，放入正常环境后观察73天（约150代）仍未复原，证明水使伪尖毛虫的毛基系发生能遗传的“彷徨变异”。

关键词

分类号

Deuterium Oxide Induced Variations on Nucleus andInfraciliature of Oxytricha fallax

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Abstract

Oxytricha fallax ,as experimental material, are treated with deuterium oxide (D2O) at different concentrations. Our results show that some variations on Oxytricha fallax nucleus can be induced by D2O, and the degree of variation increases as the concentration of D2O increases. The span of such variations is quite limited, and these organisms can be recovered to normal as soon as they are transferred to normal environment. As for the variations of infraciliature of Oxytricha fallax induced by D2O, none are found to recover to normal even though the observation lasts for 73 days (nearly 150 generations) after these organisms are transferred to normal environment. So it is suggested that D2O can cause some heritable “fluctuation variations “for the infracilieture of Oxytricha fallax.

Key words

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